

ABSTRACT OF THE DISCLOSURE

The invention adjusts the calibration of each light emitting element, such as a
5 light emitting diode (LED) by storing data representative of the difference between a
linear or non-linear characteristic of the LED. In a printer or copier, a print engine
uses LEDs to form a latent image on a photosensitive member. A linear regression
identifies the differences between the slope of the individual LED and the average
LED. A further, non-linear regression identifies the curvature of the individual LEDs.
10 The differences in linear slope and/or curvature are stored and used to correct the
calibration of each LED when the LED is recalibrated during operation and in
response to a global calibration signal, GREF.